

## NEW SPECIES OF THRIPS FROM HAITI AND TURKESTAN

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**Chirothrips spinosus** Moulton, new species

*Holotype female.* Head and antennal segments four to eight brown, thorax, legs, abdomen and antennal segments one and two orange yellow with first antennal segments and outer surfaces of middle and hind legs slightly darkened; wings clear, veins of fore wings slightly shaded.

Total body length 1.45 mm.; head length 0.126 mm., width 0.126 mm.; prothorax length 0.23 mm., width in front 0.13 mm., behind 0.28 mm.; pterothorax width 0.35 mm.; antennal segments: length (width) I, 26 (56); II, 33 to base of third segment 43 to tip of process (40 to edge of process); III, 40 (26); IV, 30 (26); V, 26 (23); VI, 36 (20); VII, 16; VIII, 10; total 216 microns. Setae on posterior angles of prothorax, outer 43 microns, inner 26 microns; at tip of abdomen 133 microns.

Front of head distinctly produced, forehead between bases of antennae and ocelli with about thirty-five setae on either side, the posterior ones occupying the area on either side of anterior ocellus; first antennal segment greatly enlarged and about twice as wide as long, segment two inverted shoe-shaped; pronotum, mesanotum almost uniformly covered with numerous short, stout setae, likewise metanotum in the middle, first tergite almost completely, second, third and fourth tergites in their distal halves and with these setae becoming more scattered on the following tergites. Fore vein of fore wing with six basal and two distal setae, hind vein with three setae.

Type material: *holotype* female and one *paratype* female taken on heads of grass, *Holcus halipensis*, December 16, 1929, by H. L. Dozier. (No. 4463.) Types in author's collection.

Type locality: DAMIEN, HAITI.

This species may be compared with *vestis* Hood but is readily separated by the more numerous setae on forehead, thorax and abdomen and the clear white colored wings.

**Liothrips jazykovi** Moulton, new species

*Holotype female.* Color blackish brown including legs; antennal segments one and six to eight blackish brown, two likewise but shading to brown in outer distal half, three yellow but somewhat clouded near the tip, four yellowish in basal half shading to dark

brown in distal half, five yellowish in basal third blackish brown in distal half, seven lightened only at extreme base; wings clear, lightly shaded at base; prominent setae dark brown.

Measurements: total body length 2.76 mm.; head length 0.323 mm., width 0.205 mm.; prothorax length 0.176 mm., width 0.323 mm.; pterothorax width 0.455 mm.; tube length 0.205 mm., width at base 0.073 mm. Length of setae: postoculars not visible, on anterior notal angles 46, midlaterals 63, on posterior angles 100, on ninth abdominal segment 166, at tip of tube 133 microns. Antennal segments length (width): I, 40 (40); II, 60 (36); III, 100 (33); IV, 86 (36); V, 76 (33); VI, 66 (31); VII, 63 (26); VIII, 43; total 529 microns.

Head 1.5 longer than wide, vertex not produced, cheeks straight, almost parallel, eyes normal; mouth cone short, reaching two-thirds across prosternum, pointed; prothorax with all normal setae developed; legs slender, fore tarsi unarmed; wings with parallel sides, fore pair with two double fringe hairs in holotype but paratypes with six and ten; tube 0.6 as long as head.

*Male allotype.* Colored as in female and only slightly smaller; angular setae on ninth abdominal segment short and stout; fore wings with six double fringe hairs.

Type material: *holotype* female, *allotype* male, one female and one male *paratype*, taken on *Tamarix* sp. July 15, 1928, by A. Jazykov after whom the species is named. (No. 3302.)

Type locality: TASHKENT, TURKESTAN, ASIA.

This species belongs among the long-headed *Liothrips* with head 1.5 longer than wide and approaches *reuteri* Bagnall, but this latter species has a protruding vertex and a lighter colored antenna. It also resembles *terminaliae* Moulton found in Japan but here the postocular setae are well developed and the sixth antennal segment is yellowish in basal third.

#### *Neoheegeria nevkvi* Moulton, new species

*Holotype female.* Color blackish brown including legs except fore tarsi and outer halves of fore tibiae which are grayish brown, and antennae except segment three which is grayish brown but yellowish at base, sides and tip and segment four which is yellowish only at extreme base; wings clear except for a small brownish area at base; all prominent setae clear.

Measurements: Total length with abdomen somewhat distended 2.69 mm.; head length 0.278 mm., width 0.24 mm.; prothorax length 0.176 mm., width including coxae 0.36 mm.; pterothorax width 0.47 mm.; tube length 0.19 mm., width at base 0.065 mm.; length of setae: postoculars 100, on anterior angles of prothorax 60, posterior angles 110, on ninth abdominal segment 190, at tip of tube 183 microns. Antennal segments length, (width), I, 40

(36); II, 60 (33); III, 76 (36); IV, 80 (36); V, 70 (28); VI, 66 (23); VII, 56 (20); VIII, 43; total 485 microns.

Head approximately 1.1 longer than wide, cheeks nearly parallel but slightly wider posteriorly; postocular setae long, pointed. Antenna 1.7 longer than head, segment four longest, segments five to eight noticeably slender; segment three with three and four with four sense cones. Eyes large, posterior ocelli placed approximate to inner angles of eyes; mouthcone broad at base extending to near posterior margin of prosternum, pointed at tip.

Prothorax with long, pointed setae on anterior margin and anterior and posterior angles; legs slender, fore pair slightly stronger, fore tarsi unarmed. Wings broadly sole-shaped, fore pair with sixteen double fringe hairs. Abdomen normal, tube .7 as long as head, with nearly parallel sides, being almost as wide at tip as at base; setae on ninth segment about as long as tube, terminal setae somewhat shorter.

*Allotype male* colored as in female; head length 0.28 mm., width 0.205 mm., being approximately 1.36 longer than wide; fore femora greatly enlarged, fore tarsus armed with a stout tooth; angular setae on ninth abdominal segment reduced to spurs.

Type material: *holotype* female, *allotype* male, *paratypes*, 12 females and 2 males, taken in flowers of *Phlomis vegel* and from another unnamed host plant, May 15 and 29, 1928, by Mr. V. Nevsky. (Nos. 3288, 3301.) Types in author's collection.

Type locality: TASHKENT, TURKESTAN, ASIA.

This species is most closely related to *Neoheegeria dalmatica* Schmutz with almost the same color, three sense cones on the third antennal segment and approximately the same number of double fringe hairs on fore wings. It differs in having clear colored setae, those on posterior angles of prothorax are not noticeably bent and are shorter than in *dalmatica*. The species is named after the collector, Mr. Nevsky.